

THIRD-ORDER LEVELING  
SEA LEVEL DATUM OF 1929

37-082-23  
CLINTWOOD QUADRANGLE  
89 VA.-55 KY.  
M3700-W215/15  
DIAGRAM MJ 17-7  
JENKINS

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Dickenson and Wise Counties, Virginia  
and Pike County, Kentucky

Only the permanent marks are listed  
for lines run more than 25 years  
before edition date

Final adjustment of 1973

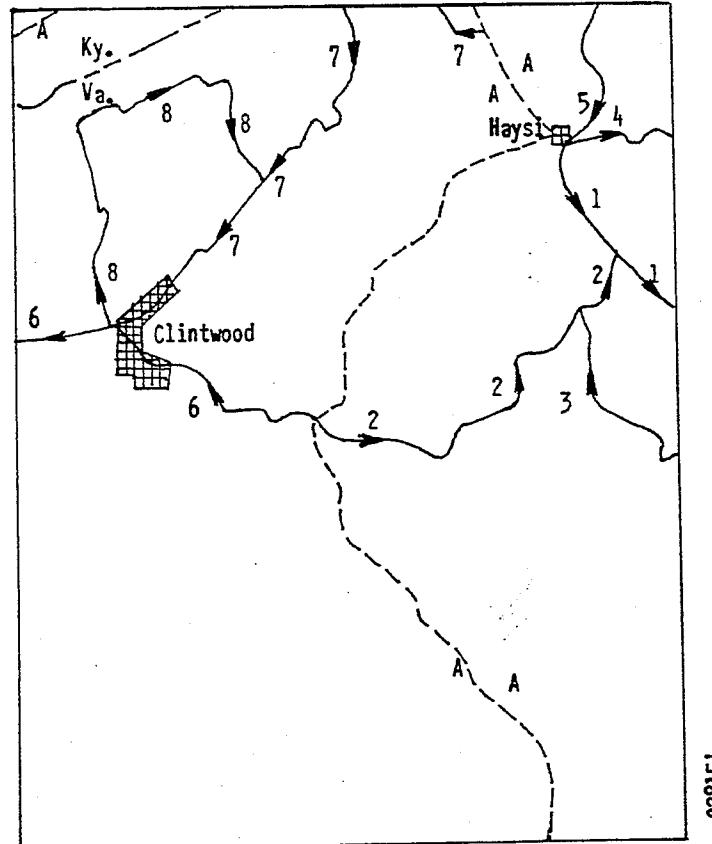
Edition of 4/18/73

PR: WSM/ca

REGINA  
(119 VA.-84 KY.)

POUND  
(90 VA.-56 KY.)

BUCU  
(88)



37°00'

82015'

COEBURN  
(59)

NGS (USC&GS) VERTICAL CONTROL DATA

A. Quadrangle 370822

CLINTWOOD QUADRANGLE

INDEX OF PERMANENT MARKS

<u>MARK (USGS)</u>	<u>PAGE NO.</u>	<u>MARK (USGS)</u>	<u>PAGE NO.</u>
1084 1912	4	58 WSM 1960 1411	7
1128	3	59 WSM 1960 2243	6
1188 1912	4	60 WSM 1960 2357	6
1193 VA	4	61 WSM 1960 1579	6
1287 VA	3	62 WSM 1960 1932	8
1304 VA 1912	3	63 WSM 1960 1461	8
1377 VA	3	64 WSM 1960 1816	8
1381 VA 1912	3	65 WSM 1960 1771	8,10,10
1555 VA	4	66 WSM 1960 RESET 1971	9
1616 VA	4	70 WSM 1960 1797	9
1789 VA 1912	3	71 WSM 1960 1469	9
1801 VA 1912	3	72 WSM 1960 1586	9
1822 VA 1912	3	73 WSM 1960 1995	9,11
2081 VA	4	74 WSM 1960 1779	10
7 B 1912 1617	4	75 WSM 1960 1801	10
8 B 1912 1784	3	76 WSM 1960 1478	11
9 B 1912 1440	3	NOT STAMPED (1221)	3
10 B 1912 1925	3		
11 B 1912 1486	3		
12 B 1912 1505	3		
13 B 1912 1616	3		
15 B 1912 1765	3		
TT 17 CWH 1953 1879	11	G 108 1935	9
TT 18 CWH 1953 1634	10	K 108 1935	4
TT 19 CWH 1953 1823	10	S 108 1935	5,8
TT 20 CWH 1953 1456	10		
45 WSM 1960 1283	4,6		
46 WSM 1960 1924	4		
49 WSM 1960 1827	5		
50 WSM 1960 1454	5		
51 WSM 1960 1345	5		
52 WSM 1960 1305	6		
53 WSM 1960 1293	6		
54 WSM 1960 1386	7		
55 WSM 1960 1404	7		

NGS

G 108 1935	9
K 108 1935	4
S 108 1935	5,8

CLINTWOOD QUADRANGLE  
Books A8954, A9109

89 VIRGINIA-55 KENTUCKY

37-082-23

3

ISOLATED BENCH MARKS

FEET

By L. F. Biggs, C. W. Arnold, and J. B. Metcalfe, 1912; Books A8954, A9109)

Dante; 50 ft NE. of post office; in S. end of W. abutment of RR. bridge; standard tablet stamped "15 B 1912 1765" (Tied by NGS, 1935) (Reported not found, 1958)

1764.599

Haysi, 6.0 mi N. of; 10 ft N. of N. rail of main track; 1 ft W. of E. end of N. headwall of stone box culvert; in headwall; standard tablet stamped "1128" (Tied by NGS, 1935)

1127.983

Clintwood; in concrete stoop 15 ft W. of door to courthouse; standard tablet stamped "8 B 1912 1784" (Reported destroyed, 1953)

1784

Clintwood, 2.6 mi SE. of; 50 ft W. of Cranesnest River at ford; in slate ledge; standard tablet stamped "9 B 1912 1440" (Reported not found, 1954)

1440

Clintwood, 4.7 mi SE. of; 100 ft W. of top of ridge between Cranesnest and McClure Rivers; on N. edge of rd.; in boulder; standard tablet stamped "10 B 1912 1925" (Reported not found, 1958)

1925

Stratton, 1.8 mi N. of; at E. edge of rd.; at N. end of flat; in boulder; standard tablet stamped "11 B 1912 1486" (Reported destroyed, 1958)

1486

Nora, 100 ft S. of schoolhouse; 20 ft E. of rd.; in boulder; standard tablet stamped "12 B 1912 1505" (Reported destroyed, 1958)

1505

Nora, 3.8 mi SE. of; 800 ft S. of mouth of Honey Creek; at E. edge of rd.; in boulder; standard tablet stamped "13 B 1912 1616" (Reported not found, 1958)

1616

Clintwood, 3.2 mi NE. of; 200 ft S. of stream crossing; 40 ft S. of rd.; in rock ledge; standard tablet stamped "1801 VA 1912"

1801

Clintwood, 5.6 mi NE. of; 500 ft E. of house; S. of rd.; in outcrop of rock; standard tablet stamped "1789 VA 1912" (Reported destroyed, 1953)

1789

Tandy, 1.0 mi NE. of; 100 ft W. of Cranesnest River; at rd. crossing; in boulder; standard tablet stamped "1304 VA 1912" (Reported not found, 1958)

1304

Tandy, 4.2 mi NE. of; 100 ft NE. of Mount Olive Church; in triangle at rd. forks; in large boulder; standard tablet stamped "1822 VA 1912" (Reported destroyed, 1974)

1821

Haysi, 0.4 mi E. of; N. of rd.; in rock ledge; standard tablet stamped "1381 VA 1912"

1380

Haysi, 2.2 mi N. of; 400 ft N. of N. end of RR. bridge; on bank of river; in ledge; standard tablet not stamped

1221

Sand Lick; at bend in rd. on E. side; opposite Jackson's store; in sandstone ledge; standard tablet stamped "1287 VA" (Reported not found, 1958)

1287

Mart Post Office, about 1.6 mi E. of; 100 ft W. of Doe Branch; on N. side of rd.; in ledge; standard tablet stamped "1377 VA"

1376

ISOLATED BENCH MARKS (Cont'd.)

		<u>FEET</u>
Fullers Gap, about 2.8 mi N. of; about 600 ft N. of iron bridge over Tracys Fork; on E. side of rd.; in culvert; standard tablet stamped "1616 VA" (Stamped erroneously) (Reported not found, 1954)	1726	
Darwin Post Office; 150 ft W. of Long Fork; at path leading to house of Mr. Grizzle; in rock on S. side of rd.; standard tablet stamped "1555 VA" (Reported not found, 1958)	1555	
Ore Knob, 500 ft E. of; S. of rd.; in large boulder; standard tablet stamped "1188 1912" (Reported not found, 1954)	1188	
Calhoun Station, 0.6 mi N. of; 450 ft N. of milepost 8; at cement RR. culvert over Lonesome Branch; in top of S. end of culvert on E. side of track; standard tablet stamped "1193 VA" (Tied by NGS, 1935)	1193.126	
Ashcamp, 150 ft E. of; N. of rd.; in large boulder; standard tablet stamped "1084 1912"	1084	
Clintwood, 4.0 mi W. of; 150 ft W. of schoolhouse; 20 ft N. of rd.; in boulder; standard tablet stamped "7 B 1912 1617"	1616	
Fullers Gap, about 0.2 mi S. of; on W. side of new graded rd.; in culvert; standard tablet stamped "2081 VA" (Erroneously stamped)	2191	

LINE 1.

By W. S. Monk, 1960; Book AV 824

5 1 0.00	"K 108 1935" (NGS)	1281.562
5 1 0.40	U.E., 140 ft S. of, and 1 ft higher than junction of State Highways 80 and 83; on W. end of N. abutment of concrete bridge over Prater Creek; chiseled cross	1265.61
5 3 2.14	U.E., Haysi, 2.1 mi S. of; at drain crossing; on S. end of W. headwall of concrete culvert; chiseled square	1277.45
5 5 2.84	Haysi, 2.4 mi S. of junction of State Highways 80 and 83; at Birchleaf; 260 ft SE. of, and 1 ft higher than junction of Highway 80 and County Road 607; in S. end of E. abutment of concrete bridge over Russell Fork River; standard tablet stamped "45 WSM 1960 1283"	1282.530
5 4 2.83	Reference mark; 220 ft E. of tablet; on N. end of E. abutment of concrete bridge; chiseled cross	1280.68
5 8 4.49	Haysi, 4.1 mi SE. of junction of State Highways 80 and 83; 200 ft SE. of, and 2 ft higher than junction of Highway 80 and County Road 605; in E. end of S. abutment of concrete bridge over Russell Fork River; standard tablet stamped "46 WSM 1960 1294"	1293.558

LINE 1 (Cont'd.)

5 7 4.45 Reference mark; 180 ft N. of tablet; on W. corner of concrete sidewalk at NE. end of bridge; chiseled cross

1293.92

FEETLINE 2.

By W. S. Monk; 1960; Book AV 824

5 20	0.00	"S 108 1935" (NGS)	1453.888
5 21	1.11	U.E., Fremont, 1.1 mi E. of; 60 ft SW. of, and 3 ft lower than junction of Y-rd.; 25 ft S. of County Road 652; on rock outcrop; chiseled cross	1602.10
5 25	3.40	Fremont, 3.4 mi E. of Clinchfield Railway Station; 280 ft E. of and 21 ft higher than junction of County Roads 661 and 652; 32 ft NE. of centerline of rd. at metal pipe culvert; 5 ft W. of 14-in. hickory tree; in rock outcrop; standard tablet stamped "49 WSM 1960 1827"	1826.788
5 24	3.38	Reference mark; 50 ft SW. of tablet; on boulder; chiseled cross	1813.35
5 26	3.79	U.E., Fremont, 3.8 mi E. of; 40 ft W. of, and 7 ft higher than crossroads; on rock outcrop; chiseled cross	1904.37
5 28	4.72	U.E., Fremont, 4.7 mi E. of; 23 ft S. of, and 4 ft higher than centerline of rd.; at E. end of sharp curve; on S. end of large boulder; chiseled cross	1711.16
5 31	5.93	Fremont, 5.8 mi E. of Clinchfield Railway Station; 0.4 mi W. of Counts; 170 ft NW. of, and 20 ft higher than centerline of County Road 661 at crossing of Dog Branch; 60 ft N. of centerline of rd.; in large boulder 5 ft W. of SE. end; standard tablet stamped "50 WSM 1960 1454"	1453.525
5 32	5.96	Reference mark; 170 ft SE. of tablet; at E. end of S. headwall of concrete culvert; on wingwall; chiseled cross	1453.54
5 33	6.37	U.W., Fremont, 6.3 mi E. of; 120 ft W. of, and 1 ft higher than junction of County Roads 670 and 671; on concrete wingwall at NE. end of concrete culvert; chiseled cross	1392.88
5 35	8.07	Reference mark; 100 ft W. of tablet; on W. end of concrete retaining wall; chiseled cross	1347.03
5 36	8.10	Counts, 1.7 mi N. of; 4.8 mi SW. of Birchleaf (junction of State Highway 80 and County Road 671); 520 ft E. of junction of County Roads 664 and 670 (Clinchco Road); 19 ft S. of, and 2 ft lower than centerline of Road 670; 6 ft above ground and 7 ft above Lick Creek; set vertically in concrete retaining wall 7 ft W. of E. end; standard tablet stamped "51 WSM 1960 1345"	1344.812

LINE 2 (Cont'd.)

		FEET
5 38	9.36 U.E., Birchleaf, 3.5 mi SW. of; at drain crossing; 20 ft E. of, and w ft lower than centerline of rd.; on W. end of concrete retaining wall; chiseled cross	1321.25
5 39	9.83 Reference mark; 55 ft NW. of tablet; on NW. end of NW. concrete wingwall; chiseled cross	1313.50
5 40	9.83 Birchleaf, 3.1 mi SW. of junction of State Highway 80 and County Road 670; 75 ft S. and 12 ft E. of, and 8 ft lower than junction of County Roads 670 and 671; 1 ft E. of E. end of S. concrete abutment of bridge over Lick Creek; 8 ft N. of SE. end of SE. concrete wingwall; in concrete footing of abutment; standard tablet stamped "52 WSM 1960 1305"	1305.241
5 41	11.04 Birchleaf, 1.9 mi SW. of; 85 ft S. and 65 ft E. of, and 3 ft higher than junction of County Road 671 and Y-drive S. to pulloff area; 30 ft W. of, and 11 ft higher than water at W. bank of Lick Creek; 10 ft NNW. of 16-in. poplar tree; in SW. end of boulder; standard tablet stamped "53 WSM 1960 1293"	1293.383
5 44	12.89 "45 WSM 1960 1283" (Described in line 1)	1282.530

LINE 3.

By W. S. Monk, 19601 Book AV 824

4 61	4.55 Tiny, 1.9 mi SW. of; 150 ft NE. of crossroads (County Roads 604 and 661); 48 ft NE. of NE. corner of Fling Gap abandoned schoolhouse; 25 ft SE. of Road 604; in center of large boulder; standard tablet stamped "59 WSM 1960 2243"	2242.361
4 62	4.56 Reference mark; 50 ft SW. of tablet; 15 ft SE. of rd.; on rock ledge; chiseled cross	2240.30
4 67	6.60 Flint Gap, 2.0 mi NW. of junction of County Roads 604 and 661; 3.3 mi SE. of Counts; at crest; 60 ft SE. of, and 2 ft higher than junction of Y-rd. NE.; 22 ft E. of Road 661; in concrete post; standard tablet stamped "60 WSM 1960 2357"	2356.844
4 70	7.62 U.E., Counts, 2.3 mi SE. of; 310 ft E. of crest; 12 ft NW. of, and 3 ft higher than centerline of junction of drive N.; on rock ledge; chiseled cross,	2259.42
4 71	7.93 U.E., Counts, 0.8 mi SE. of; 160 ft W. of, and 8 ft lower than junction of Y-rd.; 15 ft N. of rd.; on rock ledge; chiseled cross	2165.85
4 75	8.78 Counts, 1.1 mi SSW. of junction of County Roads 670 and 661; 22 ft N. of, and 6 ft higher than centerline of rd. at drain crossing; 25 ft SW. of SW. corner of residence of Morgan Dell; 20 ft NE. of rd.; in large boulders; standard tablet stamped "61 WSM 1960 1579"	1578.698

LINE 3 (Cont'd.)

4 77 9.92	Chiseled cross (Described in line 2)	1392.88
-----------	--------------------------------------	---------

FEETLINE 4.

By W. S. Monk, 1960; Book AV 824

5 45 0.00	Chiseled cross (Described in line 1)	1265.60
-----------	--------------------------------------	---------

5 46 1.16	U.E., Haysi, 1.6 mi E. of; 35 ft S. of, and 1 ft lower than junction of State Highways 80 and 83; 4 ft W. of NW. corner of Three Way cafe and service station; on NW. corner of concrete walk; chiseled cross	1351.16
-----------	---	---------

5 46 1.44	Haysi, 1.9 mi E. of; 105 ft S. of, and level with junction of Y-drive S.; 14 ft SW. of centerline of State Highway 83; 7 ft NE. of drive S.; set vertically in concrete retaining wall 8 ft W. of W. end; standard tablet stamped "54 WSM 1960 1386"	1385.87 <sup>4</sup>
-----------	--	----------------------

5 47 1.44	Reverence mark; 8 ft E. of tablet; on E. end of concrete retaining wall; chiseled cross	1387.62
-----------	---	---------

5 51 3.08	U.E., Haysi, 3.6 mi E. of; at drain; 16 ft N. of, and 1 ft lower than centerline of hwy.; on N. end of W. concrete capped stone abutment of wooden bridge; chiseled cross;	1388.21
-----------	--	---------

5 52 3.67	Haysi, 4.2 mi E. of; 110 ft NE. of, and 3 ft higher than junction of State Highway 83 and County Road 680; 30 ft E. of hwy.; 15 ft N. of NW. corner of Yates and Compton garage; in NW. end of 20- by 3-ft concrete slab; standard tablet stamped "55 WSM 1960 1404" (Reported destroyed, 1974)	1403.772
-----------	---	----------

5 53 3.70	Reference mark; 190 ft S. of tablet; 13 ft E. of hwy.; on N. concrete wingwall of bridge; chiseled cross	1400.57
-----------	--	---------

LINE 5.

W. S. Monk, 1960; Book AV 824

5 72 6.16	U.E.; Haysi, 3.1 mi N. of; 30 ft E. of, and 1 ft lower than centerline of State Highway 80; 12 ft SW. of NW. corner of Bartlick Church; on NW. corner of concrete walk; chiseled cross	1398.47
-----------	--	---------

5 73 7.41	Haysi, 2.1 mi N. of; 0.2 mi SE. of junction of Bartlick Road and State Highway 80; 30 ft N. of, and 3 ft higher than centerline of hwy.; 4 ft S. of 14-in. black walnut tree; in E. edge of rock ledge; standard tablet stamped "58 WSM 1960 1411"	1410.774-
-----------	--	-----------

5 75 8.11	U.E., 30 ft W. of, and 2 ft higher than centerline of hwy. at crest; on SW. corner of concrete steps; chiseled cross	1755.65
-----------	--	---------

LINE 5 (Cont'd.)FEET

5 76	8.53	U.E., on centerline of junction of V-rd.; painted circle, painted "CL 1621.8"	1621.56
5 78	9.27	Chiseled cross (Described in line 4)	1351.16

LINE 6.

W. S. Monk, 1960; Book AV 824

6 1	0.00	"S 108 1935" (NGS) (See line 2)	1453.888
6 2	1.01	U.E., Fremont, 1.0 mi W. of; 20 ft W. of, and level with centerline of hwy.; on N. end of W. headwall of concrete culvert; chiseled cross	1740.29
6 3	1.55	Reference mark; 130 ft E. of tablet; 45 ft NW. of corssroads; on center of concrete step; chiseled cross	1928.33
6 4	1.58	Fremont, 1.6 mi W. of; 5.3 mi E. of Clintwood; 170 ft W. of, and 2 ft higher than crossroads; 75 ft SW. of centerline of State Highway 83; 15 ft S. of NE. corner of Four service station and market; in concrete apron; standard tablet stamped "62 WSM 1960 1932"	1931.593
6 8	3.33	U.E., Fremont, 3.3 mi W. of; 200 ft N. of, and 4 ft higher than junction of V-rd.; 25 ft NE. of centerline of State Highway 83; on ledge; chiseled cross, painted "UE 1564.3"	1564.16
6 10	4.03	Fremont, 4.0 mi W. of; 2.9 mi E. of Clintwood; 100 ft S. of, and 1 ft higher than junction of V-rd.; in S. end of W. abutment of concrete bridge over Cranesnest River; standard tablet stamped "63 WSM 1960 1461"	1460.358
6 9	3.99	Reference mark; 240 ft W. of tablet; on N. end of E. concrete abutment; chiseled cross	1458.94
6 14	5.53	Clintwood, 1.4 mi E. of; 45 ft NE. of, and 4 ft lower than junction of V-rd. (State Highway 83 and County Road 632); 35 ft N. of centerline of hwy.; in concrete walk at SW. corner of Rasnick Grocery; standard tablet stamped "64 WSM 1960 1816"	1816.119
6 13	5.48	Reference mark; 240 ft SE. of tablet; 25 ft S. of hwy.; on E. end of S. headwall of concrete culvert; chiseled cross	1798.61
6 19	6.92	Clintwood; 25 ft SE. of NW. corner of high school; 62 ft SW. of, and 1 ft higher than centerline of State Highway 83; in NE. end of concrete wall; standard tablet stamped "65 WSM 1960 1771"	1770.514-
6 18	6.92	Reference mark; 29 ft E. of tablet; on NE. corner of concrete wall; chiseled cross	1770.51

LINE 6 (Cont'd.)FEET

6 22	8.70	Clintwood, 1.8 mi SW. of; at Georges Fork; 80 ft W. and 19 ft S. of and 4 ft higher than old State Highways 83 and intersection of relocated Route 72; 46.9 ft from SE. corner of concrete bridge; 50.6 ft from NE. corner of concrete bridge and 3.5 ft due W. from gate post; in concrete post 0.5 ft above ground; standard tablet stamped "66 WSM 1960 RESET 1971"	1609.642
6 23	9.31	U.E., Clintwood, 2.4 mi W. of; at drain crossing; 15 ft S. of, and 3 ft lower than centerline of hwy.; on S. end of E. stone abutment of concrete bridge; chiseled cross	1550.43
6 24	10.21	U.E., Clintwood, 3.3 mi W. of; at drain crossing; on E. end of N. headwall of concrete culvert; chiseled cross	1570.30

LINE 7.

W. S. Monk, 1960; Book AV 824

6 42	0.00	"G 108 1935" (NGS)	1204.230
6 52	5.45	U.E., Tivis; 70 ft NW. of, and 3 ft lower than junction of Y-rd. (County Roads 611 and 615); 15 ft N. of centerline of Road 611; on W. edge of rock ledge; chiseled cross	1893.84
6 54	6.52	Twin Branch School; 0.1 mi ESE. of junction of Y-rd.; 7 ft N. and 6 ft W. of SW. corner of school; in NW. end of concrete steps; standard tablet stamped "70 WSM 1960 1797", painted	1797.010
6 57	7.99	Twin Branch School, 1.5 mi S. of; 0.3 mi N. of junction of County Roads 615 and 683; 300 ft NW. of sharp curve; 13 ft NE. of, and 3 ft higher than centerline of Road 615; set vertically in rock ledge; standard tablet stamped "71 WSM 1960 1469"	1468.892
6 60	9.17	U.E., 45 ft NE. of, and level with centerline of County Road 615; at USGS gaging station; in SW. end of concrete step; bolt	1297.84
6 63	10.16	Twin Branch School, 3.4 mi SSW. of; 3.0 mi NE. of Dwale; 0.3 mi SE. of junction of County Roads 617 and 614; 16 ft NE. of, and 3 ft lower than centerline of rd.; 6 ft NW. of E. end of concrete retaining wall; set vertically in N. face of wall; standard tablet stamped "72 WSM 1960 1586"	1586.274
6 66	11.91	U.E., Dwale, 1.2 mi NE. of; 40 ft S. of fenceline E.; 20 ft E. of, and 1 ft higher than centerline of rd.; on NW. end of concrete wellcover	1782.57
6 68	13.12	Dwale; 5.5 mi NE. of Clintwood Court House; 50 ft S. of SW. corner of two-story concrete block store; 50 ft SW. of, and 1 ft higher than centerline of County Road 607; in E. end of concrete base of gasoline pump; standard tablet stamped "73 WSM 1960 1995"	1995.092

LINE 7 (Cont'd.)

			<u>FEET</u>
6 69	13.12	Reference mark; 50 ft N. of tablet; at SW. corner of store; on concrete walk; chiseled cross	1994.72
6 73	14.63	Clintwood, 4.0 mi NE. of courthouse; 115 ft S. and 25 ft W. of, and 6 ft higher than crossroads; 140 ft S. of SW. corner of concrete block store building; 19 ft NE. of NE. corner of white frame house; in SW. end of large boulder; standard tablet stamped "74 WSM 1960 1779"	1779.028
6 74	15.43	U.E., Clintwood, 3.2 mi NE. of; 65 ft S. of, and 2 ft higher than cross lanes; 33 ft NW. of NE. corner of Flemington Church; on NE. end of concrete walk; chiseled cross	1841.39
6 77	17.22	Clintwood, 1.6 mi NW. of courthouse; 20 ft E. of, and 1 ft higher than centerline of County Road 607; 65 ft S. of SW. corner of cemetery; in SE. end of rock ledge; standard tablet stamped "75 WSM 1960 1801"	1801.245
6 78	18.14	U.E., Clintwood, 0.7 mi NW. of; 30 ft SW. of, and 1 ft lower than junction of Y-rd. (County Roads 607 and 1010); on concrete curb; chiseled cross	1774.52
6 79	19.00	"65 WSM 1960 1771" (Described in line 6)	1770.514

LINE 8.

By W. S. Monk, 1960; Book AV 824

7 1	0.00	"65 WSM 1960 1771" (Described in line 6) (Also in line 7)	1770.514
7 6	3.15	Isom; 100 ft N. of N. end of bridge over Pound River; 75 ft NW. of store; 20 ft NE. of centerline of County Road 611; 4 ft N. of 10-in. sycamore tree; in large boulder; standard tablet stamped "TI 20 CWH 1953 1456"	1456.280
7 12	5.28	U.E., Isom 2.1 mi NE. of; 25 ft W. of County Road 611; 115 ft SW. of, and 2 ft higher than drive to residence of Toby Anderson; on rock ledge; chiseled cross	1858.60
7 13	5.76	Isom, 2.6 mi NE. of; 190 ft SW. of creek crossing; 18 ft NW. of centerline of County Road 611; 75 ft NE. of creek crossing; 4 ft SE. of fence; in boulder; standard tablet stamped "TI 19 CWH 1953 1823"	1822.824
7 16	7.27	U.E., Blowing Rock, 1.7 mi SW. of; 70 ft E. and 20 ft N. of, and 9 ft higher than junction of rd. N.; on rock ledge; chiseled cross	1692.68
7 17	8.13	Skeet Rock; 1.4 mi NW. of, along County Road 619, thence 0.9 mi SW.; 5.0 mi NE. of Isom; 0.9 mi SW. of Blowing Rock Post Office; 30 ft S. and 19 ft W. of, and 2 ft higher than centerline of rd. at private rd. S.; in rock boulder; standard tablet stamped "TI 18 CWH 1953 1634"	1633.639

LINE 8 (Cont'd.)

7 20	8.96	U.E., 70 ft N. of NE. corner of post office at Blowing Rock; 50 ft N. of and 5 ft higher than centerline of rd.; at entrance to residence of H. C. Vanover; on center of concrete steps; chiseled cross	1855.85
7 24	10.70	Skeet Rock; in NE. corner of school ground; 36 ft SW. of centerline of rd.; in large boulder; standard tablet stamped "TI 17 CWH 1953 1879"	1878.674
7 28	12.37	Skeet Rock, 1.7 mi S. of; 25 ft W. of, and 9 ft higher than County Road 619; 35 ft N. of telephone pole No. 29; 260 ft W. of NW. corner of residence of Estel Triplett; in NW. corner of large boulder; standard tablet stamped "76 WSM 1960 1478"	1478.002
7 34	14.52	"73 WSM 1960 1995" (Described in line 7)	1995.092

HORIZONTAL CONTROL  
NORTH AMERICAN DATUM OF 1927

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

37-082-23  
CLINTWOOD QUADRANGLE  
89 VA.-55 KY.  
N3700-W8215/15  
DIAGRAM NJ 17-7  
JENKINS

Dickenson and Wise Counties, Va.;  
Pike County, Ky.

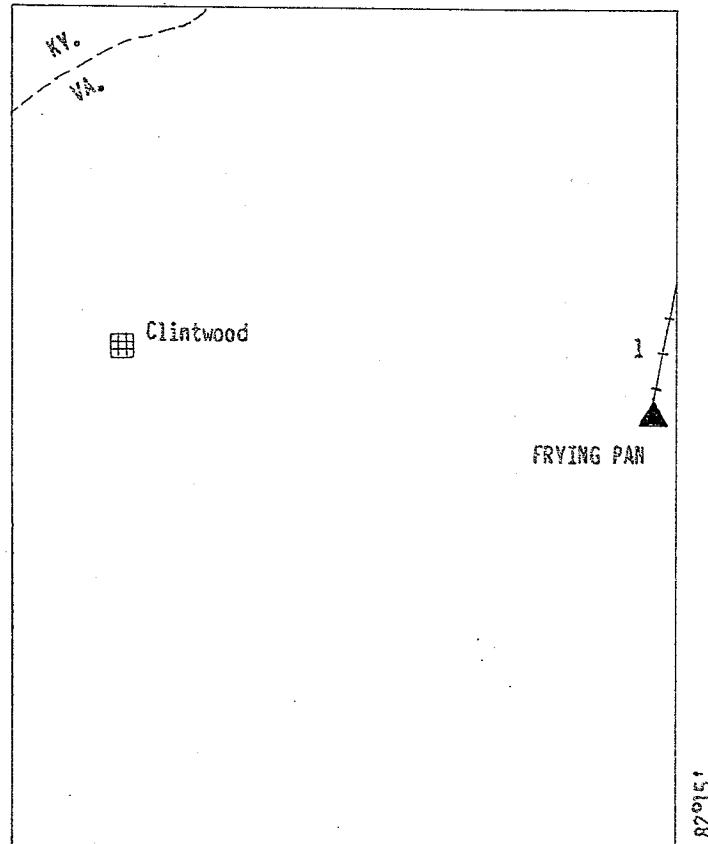
Only the permanent marks are  
listed for control classified  
obsolete and are not shown on  
sketch

Edition of 12/31/75

RR: CRV/rmm

Plane coordinates are based on Lambert projection,  
Virginia, South Zone and Kentucky, South Zone

REGINIA  
(84 KY.-119 VA.)



COEBURN  
(59)

89 VA.-55 KY.  
CLINTWOOD QUADRANGLE

37-082-23  
N3700-L8215/15

INDEX OF PERMANENT MARKS

<u>MARK (USGS)</u>	<u>PAGE NO.</u>	<u>LINE NO.</u>
TT 17 CWH 1953	3	
TT 18 CWH 1953	3	
TT 19 CWH 1953	3	
TT 20 CWH 1953	3	
TT 21 CWH 1953	3	

CLINCHFIELD COAL CORPORATION

FRYING PAN 1909

4

89 VA.-55 KY.  
CLINTWOOD QUADRANGLE

37-082-23

3

STATION	DESCRIPTION	LATITUDE	LONGITUDE
	PLANE COORDINATES, FEET	°   '   "	°   '   "

The following positions are considered OBsolete. To be used only to locate permanent marks in the field.

By C. W. Haas, 1953; Book AH 316

Skeet Rock; in NE. corner of school grounds; 36 ft SW. of centerline of rd.; in large boulder 3 ft above ground; standard tablet stamped "TT 17 CWH 1953"

X = 860,790	Y = 347,036	37 13 17.95	82 24 48.90
-------------	-------------	-------------	-------------

Skeet Rock, 1.4 mi NW. of, along State Highway 619, thence 0.8 mi SW. along State Highway 611; 5.0 mi NE. of Isom; at Blowing Rock; 30 ft N. and 19 ft W. of centerline of rd. at private rd. S.; 15 ft NE. of centerline of rd.; in rock outcrop 1.5 ft above ground; standard tablet stamped "TT 18 CWH 1953"

X = 852,515	Y = 347,535	37 13 19.48	82 26 31.37
-------------	-------------	-------------	-------------

Isom, 2.6 mi NE. of, along State Highway 611; 190 ft SW. of creek crossing; 75 ft NE. of creek crossing; 18 ft NW. of centerline of rd.; 4 ft SE. of rail fence; in rock outcrop; standard tablet stamped "TT 19 CWH 1953"

X = 842,996	Y = 345,057	37 12 51.05	82 28 27.67
-------------	-------------	-------------	-------------

Isom; 100 ft N. of N. end of bridge over Pound River; 75 ft NW. of store; 20 ft NE. of centerline of State Highway 611; 4 ft N. of 10 in. sycamore tree; in large boulder; standard tablet stamped "TT 20 CWH 1953"

X = 846,174	Y = 334,960	37 11 12.62	82 27 43.18
-------------	-------------	-------------	-------------

Isom, 2.0 mi W. of bridge over Pound River, along State Highway 631; 50 ft E. of small drain; 20 ft N. of centerline of rd.; in rock outcrop 2 ft above rd.; standard tablet stamped "TT 21 CWH 1953"

X = 837,851	Y = 335,209	37 11 11.62	82 29 26.07
-------------	-------------	-------------	-------------

89 VA.-55 KV.  
CLINTWOOD QUADRANGLE

37-082-23  
4

STATION	DESCRIPTION	LATITUDE	LONGITUDE
	PLANE COORDINATES, FEET	°   '   "	°   '   "

THIRD-ORDER ELECTRONIC TRAVERSE

Final adjustment of 1975

LINE 1.

By W. A. Blackmer, 1961; Book AH 662

Haysi, 5.0 mi SE. of, along State Highway 80, thence 1.0 mi SW. along State Highway 671, thence 1.5 mi S. along State Highway 679, thence 600 ft W. on trail along top of ridge; on property of M.D.C. Sutherland, 0.25 mi above residence; Clinchfield Coal Corporation standard one-foot square concrete post designated "FRYING PAN 1909" (Unchecked position)

VA. S.)	X = 904,333	Y = 310,884	37 07 38.27	82 15 33.17
---------	-------------	-------------	-------------	-------------

QD. 89

Station: INTERSECTION POINT NO. 17

County: Wise

State: VA.

Observer:

Year:

Datum: U. S. STANDARD DATUM

Description:

N.C.C.

No description was furnished for this station.

Station mark: Standard concrete tertiary post 1 ft square  
and projecting 1 ft above ground.

## Tertiary position

[Latitude	36	58	47.097	[Longitude	82	37	57.661	]
-----------	----	----	--------	------------	----	----	--------	---

To Station—	Azimuth	Back Azimuth	Distance	
	° / "	° / "	Log. Meters	Miles
Pine	133 10 08.1	313 07 36.6	3.9308805	
Hagan	358 20 11.7	178 20 18.5	3.9850972	

Qd. #89

Station:	INTERSECTION POINT NO. 19	County:	Wise	State:	VA.
Observer:		Year:		Datum:	N. A. D.
Description:					

No description was furnished for this station.

Station mark: Standard concrete tertiary post 1 ft square projecting 1 ft above ground.

Corr. in Secs. to refer  
position to 1927 N.A.D.  
Lat. -.18 Long. +.35

#### Tertiary Position

[Latitude 37 00 51.421 Longitude 82 28 01.014]

To Station—	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log. Meters	Miles
Bowlecamp	125	23	29.4	305	19	55.6	4.0316683	
Keel	183	21	25.1	3	21	44.3	4.1295044	
Fullers Gap	335	34	40.1	155	35	24.5	3.6444954	

Qd. #89

Station: INTERSECTION POINT NO. 20

County: Dickenson

State: VA.

Observer:

Year:

Datum: N. A. D.

Description:

No description was furnished for this station.

Station mark: Standard concrete tertiary post 1 ft square projecting 1 ft above ground.

Corr. in Secs. to refer  
position to 1927 N.A.D.  
Lat. -.18 Long. +.35

Tertiary Position

[Latitude 37 02 11.922]

Longitude 82 24 05.111 ]

To Station—	Azimuth ° ' "	Back Azimuth ° ' "	Distance	
			Log. Meters	Miles
Wampler	264 17 42.1	84 23 27.2	4.1531279	
Long	298 51 35.3	118 54 40.5	3.9387464	

QD. 89

Station: INTERSECTION POINT NO. 22	County: Dickenson	State: VA.
Observer:	Year:	Datum: N. A. D.
Description:		

Station is on Big Ridge on property of Elijah Yates in an open field on N. side of main rd., from Bear Pen Gap to Coeburn.

Station mark: Standard concrete tertiary post 1-ft square projecting 1 ft above ground.

Reference marks: Three 1-in. holes drilled in solid rock as follows:

No. 1 bears S.  $3^{\circ}30'$  E., 80.8 ft  
 No. 2 bears N.  $29^{\circ}$  W., 86.8 ft  
 No. 3 bears N.  $81^{\circ}$  E., 88.9 ft

Corr. in Secs. to refer position to 1927 N.A.D.  
 Lat. -.18 Long. +.35

#### Tertiary Position

[Latitude 37 05 58.198                      Longitude 82 24 43.452]

To Station—	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log. Meters	Miles
Wampler	290	12	25.7	110	18	34.2	4.2066878	
Long	322	32	47.2	142	36	15.6	4.1481695	

Qd. #89

Station: INTERSECTION POINT NO. 23

County: Dickenson

State: VA.

Observer:

Year:

Datum:

N. A. D.

## Description:

Station is on Big Ridge to E. of Millard Post Office, on property of Frank Large and within about 75 yards of his house, near trail from Jim Fleming's along Frank Large's house to Cranes Nest River.

Station mark: Standard concrete tertiary post 1-ft square projecting 1 ft above ground.

Reference marks: No. 1, concrete bears S.  $88^{\circ}30'$  W., 56.4 ft

No. 2, hole drilled in solid rock, bears N.  $60^{\circ}$  E., 133.6 ft

No. 3, bears S.  $51^{\circ}30'$  E., 148.7 ft

Corr. in Secs. to refer position to 1927 N.A.D.  
Lat. -.18 Long. +.35

[Latitude 37 09 41.265]

Longitude 82 23 45.718 ]

To Station—	Azimuth ° /' "	Back Azimuth ° /' "	Distance Log. Meters	Miles
Keel	62 24 36.1	242 22 21.2	3.7937548	
Birch	147 03 35.1	327 01 20.1	4.0051180	

Qd. #89

Station: INTERSECTION POINT NO. 24 County: Dickenson State: VA.  
Observer: Year: Datum: N. A. D.  
Description:

Station is on Nelly Ridge on property of Floyd Arrington, at head of Beech Branch, about 2 mi by trail from Dog Branch Gap, and about 2.5 mi from Carve Beech Gap. The trail is continuous from Dog Branch Gap through Carve Beech Gap to Martha Anderson Gap at head of Road Branch of McClure.

Station mark: Standard concrete tertiary mark 1 ft square projecting 1 ft above ground.

Reference marks: Three reference marks as follows:

No. 1, hole drilled in rock, S.  $39^{\circ}30'$  E., 21.8 ft  
No. 2, hole drilled in rock, S.  $41^{\circ}30'$  W., 47.2 ft  
No. 3, standard concrete reference mark, N.  $25^{\circ}30'$  W.,  
21.3 ft

Corr. in Secs. to refer  
position to 1927 N.A.D.  
Lat. -.18 Long. +.35

Tertiary position

[Latitude 37 08 07.303 Longitude 82 20 02.975 ]

To Station—	Azimuth	Back Azimuth	Distance	
	° ' "	° ' "	Log. Meters	Miles
World Wampler	305 39 21.6	125 41 49.6	3.8725453	
	319 26 14.1	139 29 33.6	4.0993140	

QD. 89

Station: BIRCH      County: Dickenson-Pike      State: Va.-Ky.  
 Observer:      Year:      Datum: N. A. D.  
 Description:

Station is on Birch Knob on Virginia-Kentucky State Line, on property of John Dutton, now owned in fee by the Clinchfield Coal Corp., about 1 mi W. of Blowing Rock Gap. The station can be reached from Clintwood by rd. leading through Blowing Rock Gap; leave the main rd. about 200 yds. W. of John Newberry's house and follow the trail leading to John Dutton's house, which is  $\frac{1}{2}$  mi below the station. The trail leads to top of mountain.

Station mark: 1-in. hole drilled 2 in. deep in solid rock about which is chiseled a triangle.

Reference marks: 1-in. holes drilled in rock with arrows pointing towards station as follows:

No. 1 bears approx. N.  $15^{\circ}$  E., 3.73 ft  
 No. 2 bears approx. S.  $35^{\circ}$  E., 2.43 ft  
 No. 3 bears approx. N.  $85^{\circ}$  W., 6.10 ft

Corr. in Secs. to refer  
 position to 1927 N.A.D.  
 Lat. -.18 Long. +.35

#### Secondary position

[Latitude 37 14 16.671      Longitude 82 27 28.938 ]

To Station—	Azimuth	Back Azimuth	Distance	
	°     '     "	°     '     "	Log. Meters	Miles
Keel	0    00    48.89	180    00    48.82	4.0558510	
Bowlecamp	27    12    50.34	207    08    56.59	4.3202959	
Bentley	61    22    23.16	241    16    39.44	4.2035225	

QD. 89

Station:	CARVE BEECH	County:	Dickenson	State:	VA.
Observer:		Year:		Datum:	N. A. D.
Description:					

Station is on John Edwards property on Neely Ridge between McClure and Lick Creeks. It is reached from Sand Lick by rd. to Martha Anderson Gap, from where trail leads to top of ridge along Gilliam water tract to Squire John Edwards place. It is about 75 yds. from his house near fence and on trail to Carve Beech Gap.

Station mark: Standard concrete pedestal.

Reference marks: Three concrete reference marks as follows:

No. 1 is concrete post with spike for center,  
bears approx. N.  $10^{\circ}$  E., 35.26 ft

No. 2 bears approx. S.  $30^{\circ}$  E. 34.55 ft

No. 3 is hole drilled in solid rock and  
bears approx. W. 29.05 ft

Corr. in Secs. to refer  
Position to 1927 N.A.D.  
Lat. -.18 Long. +.35

#### Secondary Position

[Latitude 37 09 44.442]

Longitude 82 18 14.801 ]

To Station—	Azimuth	Back Azimuth	Distance	
	° ' "	° ' "	Log. Meters	Miles
Democrat Cumberland	124 08 49.67 147 00 54.32	304 07 04.97 326 58 01.65	3.7129728 4.1113706	

Qd. 89

Station: CEMETERY County: Dickenson State: VA.  
Observer: Year: Datum: N. A. D.  
Description:

Station is on ridge between Cranes Nest and Pound River, NE. of Clintwood about 6 mi to S. of main rd. along top of ridge near schoolhouse between Sol Mullins and Henry Anderson, near a cemetery.

Station mark: Standard concrete tertiary post 1 ft square and projecting 1 ft above ground.

Reference marks: Concrete marks as follows:

No. 1 bears N.  $42^{\circ}$  E., 33.40 ft  
No. 2 bears S.  $62^{\circ}$  E., 33.20 ft  
No. 3 bears N.  $22^{\circ}30'$  W., 39.25 ft

Corr. in Secs. to refer position to 1927 N.A.D.  
Lat. -.18 Long. +.35

#### Tertiary Position

[Latitude 37 12 33.194      Longitude 82 23 12.338]

To Station—	Azimuth	Back Azimuth	Distance	
	°   '   "	°   '   "	Log. Meters	Miles
Cumberland	183 00 30.4	3 00 37.7	3.7514976	
Democrat	306 55 59.3	126 57 14.4	3.5837181	

Qd. 89

Station:	DEMOCRAT	County:	Dickenson	State:	VA.
Observer:		Year:		Datum:	N. A. D.
Description:					

Station is on property of H. H. Rakes, near Tarpon Post Office, on Big Ridge. The station is about 0.5 mi from Tarpon Post Office within a few hundred yards of Tarpon Schoolhouse.

Station mark: Standard concrete pedestal.

Reference marks: Three concrete reference marks as follows:

No. 1 bears approx. S. 25° E., 39 ft  
 No. 2 bears approx. S. 45° W., 39.32 ft  
 No. 3 bears approx. N. 42°

Corr. in Secs. to refer.  
 Position to 1927 N.A.D.  
 Lat. -.18° Long. +.35°

Secondary position

[Latitude 37 11 18.433 Longitude 82 21 08.067]

To Station—	Azimuth	Back Azimuth	Distance
	°   '   "	°   '   "	Log. Meters
Keel	58 00 54.10	237 57 03.96	4.0447934
Birch	120 21 48.89	300 17 58.55	4.0366459
Cumberland	160 47 36.67	340 46 28.77	3.9247036

QD. #89

Station: DOTSON

County: Dickenson

State: VA.

Observer:

Year:

Datum: N. A. D.

Description:

Station is on Big Ridge, dividing waters of McClure and Cranes Nest on bare knob, on property of Charles Dotson, near rd. from Fullers Gap to Clintwood, not far from Nasbie Post Office and near residence of Charles Dotson.

Station mark: Standard concrete tertiary post 1 ft square and projecting 1 ft above ground.

Reference marks: Three concrete marks as follows:

No. 1 bears N. 2° 45' W., 81.4 ft

No. 2 bears S. 87° 35' W., 34.2 ft

No. 3 bears S. 43° W., 85.3 ft

Corr. in Secs. to refer  
position to 1927 N.A.D.  
Lat. -.18 Long. +.35

#### Tertiary Position

[Latitude 37 04 43.773]

Longitude 82 27 06.454 ]

To Station—	Azimuth	Back Azimuth	Distance	
	°   /   "	°   /   "	Log. Meters	Miles
Pine	77 02 45.4	256 53 41.3	4.3597976	
Bentley	124 27 49.4	304 21 52.7	4.2475613	
Keel	174 55 56.5	354 55 42.9	3.8002493	

QD. 89

Station: FLAT SPUR      County: Russell      State: VA.  
Observer:      Year:      Datum: N. A. D.  
Description:

No description was furnished for this station.

Station mark: Standard concrete tertiary post 1 ft square  
and projecting 1 ft above ground.

Corr. in Secs. to refer  
position to 1927 N.A.D.  
Lat. -.18 Long. +.35

Tertiary Position

[Latitude 37 00 47.989      Longitude 82 15 43.514]

To Station—	Azimuth	Back Azimuth	Distance
	° / "	° / "	Log. Meters      Miles
Dante	19 05 13.5	199 04 31.1	3.7269547
Long	71 29 05.7	251 27 09.0	3.7040510
County	330 40 51.0	150 41 21.6	3.4098584

Qd. #89

Station:	HATCHET	County:	Dickenson	State:	V.A.
Observer:		Year:		Datum:	N. A. D.
Description:					

Station is on ridge between Lick Creek of Russells Fork and head of Hatchet Branch of McClure, on property of Jasper Sutherland, near his upper barn, and about 75 yds. from his house. A road leads from mouth of Hatchet Branch to Jasper Sutherland's property..

Station mark: Standard concrete tertiary post 1 ft square and projecting 1 ft above ground.

Reference marks: Three concrete marks as follows:

No. 1 bears N.  $40^{\circ}30'$  E., 102.3 ft  
 No. 2 bears N.  $56^{\circ}30'$  E., 68.3 ft  
 No. 3 bears S.  $88^{\circ}45'$  E., 111.8 ft

Corr. in Secs. to refer  
 position to 1927 N.A.D.  
 Lat. -.18 Long. +.35

#### Tertiary Position

To Station—	[Latitude] 37 03 45.135	Longitude	82 18 37.866	Distance
	° / "	° / "	° / "	Log. Meters Miles
Pilot	96 23 29.1	276 21 21.5		3.7211768
World	226 39 41.1	46 41 17.7		3.7356497
Wampler	283 36 06.7	103 38 34.7		3.7955847

Qd. #89

Station: KEEL      Year:      County: Dickenson      State: VA.  
 Observer:      Datum: N. A. D.  
 Description:

Station is on spur between heads of Keel's Branch and Long Branch on one side and headwaters of Holly Creek on other; on land of Henry Keel, about 20 ft from line between Henry Keel and J. F. Smith, being distant from Clintwood about 1.25 mi. Station can be reached from Clintwood by following rd. to Cranes Nest Branch via Long Branch, leaving this rd. where it crosses ridge at head of Long Branch, turn in a southwestwardly direction and follow ridge to station about 0.8 mi.

Station mark: Oak stump 7.8 ft high and 15-in. diameter at top. Spike in top of stump with grooves cut at right angles indicates center of station.

Reference marks: Concrete blocks as follows:

No. 1 bears approx. S.45° E., 39.57 ft  
 No. 2 bears approx. S. 85° W., 34.86 ft  
 No. 3 bears approx. N. 20° E., 47.17 ft

Corr. in Secs. to refer  
 position to 1927 N.A.D.  
 Lat. -.18 Long. +.35

Secondary position

[Latitude 37 08 07.766      Longitude 82 27 29.047 ]

To Station—	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log. Meters	Miles
Bowlecamp	52	55	56.67	232	52	03.26	4.0784264	
Bentley	104	50	50.68	284	45	07.43	4.1615618	
Fullers Gap	356	36	56.36	176	37	21.53	4.2429805	

QD. 89

Station:	PILOT	County: Dickenson	State: VA.
Observer:		Year:      Datum: N. A. D.	
Description:			

Station is on Pilot Ridge at head of Big Spraddle and Little Spraddle Branches of McClure Creek, on property of Elektius Smith, about 1 mi from mouth of Little Spraddle, which empties into McClure about 1 mi below mouth of open fork. A wagon road leads from McClure up Little Spraddle to ridge within one hundred yards of station.

Station mark: Standard concrete pedestal.

Reference marks: Three concrete marks with spike centers as follows:

No. 1 bearing approx. N. 80° E., 37.25 ft  
 No. 2 bearing approx. S. 30° W., 34.25 ft  
 No. e bearing approx. N. 5° W., 35.90 ft

Corr. in Secs. to refer position to 1927 N.A.D.  
 Lat. -.18 Long. +.35

#### Secondary Position

[Latitude 37 04 04.086]                          Longitude 82 22 09.556 ]

To Station—	Azimuth	Back Azimuth	Distance
	°    '    "	°    '    "	Log. Meters      Miles
Bowlecamp	90 59 52.69	270 52 46.87	4.2418843
Keel	133 37 23.96	313 34 11.23	4.0371678
World	251 02 54.88	71 06 39.13	3.9872679
Wampler	280 16 10.90	100 20 46.52	4.0601484
Long	328 10 35.55	148 12 31.22	3.9544922

QD. #89

Station:	WILLIS	County:	Dickenson	State:	VA.
Observer:		Year:		Datum:	N. A. D.
Description:					

Station is on property of Andrew Willis on ridge between McClure and Pound River, about 1 mi from Geodrich Post Office, and 1.5 mi from Haysi Post Office, on bald knoll 0.25 mi from Andrew Willis' house.

Station mark: Standard concrete tertiary post 1 ft square and projecting 1 ft above ground.

Reference marks: Concrete marks as follows:

No. 1 bears S.  $73^{\circ}30'$  E., 81.10 ft  
 No. 2 bears S.  $29^{\circ}30'$  E., 42.80 ft  
 No. 3 bears S.  $17^{\circ}30'$  W., 60.80 ft

Corr. in Secs. to refer  
 position to 1927 N.A.D.  
 Lat. -.18 Long. +.35

#### Tertiary Position

[Latitude 37 12 37.300      Longitude 82 20 03.357]

To Station—	Azimuth	Back Azimuth	Distance	
	° / ' "	° / ' "	Log. Meters	Miles
Democrat	33 17 07.1	213 16 28.0	3.4636260	
Cumberland	141 38 23.7	321 36 36.6	3.8467353	

Qd. #89

Station:	WORLD	County:	Dickenson	State:	VA.
Observer:		Year:		Datum:	N. A. D.
Description:					

Station is on main ridge dividing waters of Fryingpan and Lick Creeks, being same ridge which is described under triangulation station Wampler. This station is about 5 mi northwardly from Wampler Station, on knob on property of Joseph Rasnick, about 75 yards E. of rd. following crest of this ridge, known as "The Middle of the World", about 1 mi beyond Selton Post Office. The station can be reached from Aily Post Office on Lick Creek or Russells Fork by following rd. up creek and taking trail up Wolf Pen Branch, which leads directly to top of ridge mentioned.

Station mark: Standard concrete pedestal.

Reference marks: Three concrete marks with spike centers as follows:

No. 1 bears approx. S.  $20^{\circ}$  E., 54.55 ft  
 No. 2 bears approx. S.  $80^{\circ}$  W., 40.05 ft  
 No. 3 bears approx. N.  $25^{\circ}$  W., 54.42 ft

Corr. in Secs. to refer  
 position to 1927 N.A.D.  
 Lat. -.18 Long. +.35

To Station—	Latitude 37 05 46.232			Longitude 82 15 57.629			Distance	
	Azimuth			Back Azimuth			Log. Meters	Miles
	°	'	"	°	'	"		
Keel	104	23	44.19	284	16	46.97	4.2459774	
Democrat	143	13	27.38	323	10	19.94	4.1068561	
Carve Beech	155	15	26.16	335	14	03.36	3.9077516	
Deel	200	25	57.84	20	27	42.25	4.0868874	

QD. #89

Station: INTERSECTION POINT NO. 6      County: Dickenson      State: VA.  
 Observer:      Year:      Datum: N. A. D.  
 Description:

Station is on spur of Neely Ridge, S. of Dog Branch and W. of Lick Creek of Russell's Fork, near mouth of Josh Branch at homestead of J. Walker Counts. The distance from house of Walker Counts to station is about 0.5 mi in NW. direction up a very sharp spur. The approach is easier by going 0.5 mi downstream and then turning up to W. The station is not on top of ridge but on spur mentioned, and is sufficiently elevated to see knobs on which stations World and Wampler are located.

Station mark: Standard tertiary mark consisting of 1-ft square concrete post projecting 1 ft above ground.

Reference marks: No. 1 is 40-d nail in chestnut oak root, N.  $72^{\circ}$  E., 26.1 ft; No. 2 is standard concrete reference mark S.  $12^{\circ}30'$  W., 26.2 ft; No. 3 is 1-in. hole 2 in. deep in sandrock N.  $19^{\circ}$  W., 67.1 ft.

Corr. in Secs. to refer position to 1927 N.A.D.  
 Lat. -.18   Long. +.35

#### Tertiary Position

[Latitude 37 06 01.364      Longitude 82 18 08.280]

To Station—	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log. Meters	Miles
World	278	12	57.5	98	14	16.3	3.5132011	
Wampler	316	42	48.5	136	44	58.8	3.8914009	

QD. 89

Station: INTERSECTION POINT NO. 7 County: Dickenson State: VA.

Observer: Year: Datum: N. A. D.

Description:

Station is on ridge between Russell Prator and Russell Fork on property of B. Mullins. Station can be reached from mouth of Russell Prator by following rd. up that stream to store house thence by trail to left up spur to Mullins house from which a lane leads to highest point about 0.25 mi distant where station was built in fence corner.

Station mark: Standard tertiary mark consisting of 1-ft square concrete post projecting 1 ft above ground.

Reference marks: Three concrete marks set as follows:

No. 1 N.  $75^{\circ}$  E., 28.30 ft  
 No. 2 S.  $20^{\circ}$  W., 20.25 ft  
 No. 3 due W. 42.90 ft

Corr. in Secs. to refer position to 1927 N.A.D.  
 Lat. -.18 Long. +.35

#### Tertiary Position

[Latitude 37 13 02.596      Longitude 82 17 18.845]

To Station—	Azimuth	Back Azimuth	Distance	
	° ' "	° ' "	Log. Meters	Miles
Carve Beech	12 44 09.2	192 43 35.4	3.7967498	
Democrat	60 25 11.4	240 22 52.8	3.8129830	
Reel	287 44 05.2	107 46 36.8	3.8182177	

QD. 89

Station: INTERSECTION POINT NO. 9      County: Dickenson      State: VA.  
Observer:      Year:      Datum: N. A. D.  
Description:

Station is on ridge between Cranes Nest and Pound River near wagon rd. from Clintwood to mouth of Cranes Nest at Nickels Gap on property of Artrip, and about 5 mi E. of Clintwood. Station is in edge of woods along a fence bordering a cleared field and to N. and W. of rd. at Nickels Gap.

Station mark: Standard concrete mark consisting of 1-ft square concrete post projecting 1 ft above ground.

Reference marks: Three 1-in. holes drilled in solid rock located as follows:

No. 1 bears N.  $18^{\circ}30'$  E., 21.3 ft  
No. 2 bears S.  $25^{\circ}30'$  E., 15 ft  
No. 3 bears N.  $86^{\circ}$  W., 20.40 ft

Corr. in Secs. to refer position to 1927 N.A.D.  
Lat. -.18   Long. +.35

#### Tertiary Position

[Latitude 37 11 18.438      Longitude 82 24 46.300]

To Station—	Azimuth	Back Azimuth	Distance	
	°   '   "	°   '   "	Log. Meters	Miles
Cumberland	198 12 23.4	18 13 27.4	3.9221251	
Democrat	269 59 00.5	90 01 12.4	3.7309991	

QD. 89

Station: INTERSECTION POINT NO. 10      County: Dickenson      State: VA.  
 Observer:      Year:      Datum: N. A. D.  
 Description:

Station is on spur between Georges Fork and Brush Creek on property of John Trivitt, adjoining property of C. W. Vanover. Station can be reached from Clintwood by following main rd. to Georges Fork to John Grivitt's store, thence following trail to right to top of spur. The trail leads through a small gap across ridge to Brush Creek. The station is located on top of spur directly to S. of gap through which trail passes. The station may also be reached from Brush Creek Road.

Station mark: Standard concrete tertiary mark consisting of 1 ft square concrete post projecting 1 ft above ground.

Reference marks: Three concrete reference marks as follows:

No. 1 bears N.  $31^{\circ}$  E., 21.9 ft  
 No. 2 bears S.  $49^{\circ}$  E., 21.8 ft  
 No. 3 bears S.  $84^{\circ}45'$  W., 23.5 ft

Corr. in Secs. to refer position to 1927 N.A.D.  
 Lat. -.18   Long. +.35

#### Tertiary Position

[Latitude  $37^{\circ} 09' 49.997''$       Longitude  $82^{\circ} 28' 44.771''$  ]

To Station—	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log. Meters	Miles
Bowlecamp	36	32	28.4	216	29	20.6	4.1109952	
Bentley	92	39	05.2	272	34	07.6	4.0851816	
Keel	329	19	39.8	149	20	25.6	3.5639375	

Qd. #89

Station: INTERSECTION POINT NO. 16      County: Dickenson      State: VA.  
Observer:      Year:      Datum: N. A. D.  
Description:

No description was furnished for this station.

Station mark: Standard concrete tertiary post 1 ft. square  
projecting 1 ft above ground.

Corr. in Secs. to refer.  
position to 1927 N.A.D.  
Lat. -.18 Long. +.35

Tertiary Position

[Latitude 37 05 21.499      Longitude 82 29 52.869 ]

To Station—	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log. Meters	Miles
Birch	192	08	08.2	12	09	35.1	4.2272633	
Keel	214	42	06.2	34	43	33.0	3.7948618	